

- b. storing a copy of the joining management record pointer instances for each child display pane.

23. The method of claim 1, further comprising the steps of:

- a. accepting user revisions to the data displayed;
- b. determining whether the revision is a data revision;
- c. updating the management record instances if the revision is a data revision;
- d. determining whether the revision affects a function;
- e. maintaining and executing the affected functions if the revision affects a function;
- f. determining whether the revision affects a filter;
- g. maintaining and executing the affected filters if the revision affects a filter, each filter execution corresponding to a data selection according to a set of data selection criteria;
- h. determining whether the revision is a sort revision; and
- i. maintaining and executing the affected sort if the revision is a sort revision,

24. The method of claim 23, wherein the step of maintaining and executing the affected functions if the revision affects a function comprises the steps of:

- a. retrieving user changes to the function;
- b. replacing calculated fields used in the function with their function;
- c. updating primary record types used to point to the changed function;
- d. updating the management record to point to the changed function;
- e. reading the management record instance; and
- f. executing the changed function.

25. The method of claim 23, wherein the step of maintaining and executing the affected functions if

the revision affects a function comprises the steps of:

- a. retrieving user changes to the function;
- b. replacing calculated fields used in the function with their function;
- c. updating primary record types used to point to the changed function;
- d. updating the dynamic document to point to the changed function;
- e. reading the dynamic document; and
- f. executing the changed function.

26. The method of claim 23, wherein the step of maintaining and executing the affected filters if the revision affects a filter comprises the steps of:

- a. retrieving user changes to the filter;
- b. updating the management record type definition to point to the changed filter;
- c. reading the management record instance for the filter's management record pointer family; and
- d. executing the filter.

27. The method of claim 23, wherein the step of maintaining and executing the affected filters if the revision affects a filter comprises the steps of:

- a. retrieving user changes to the filter;
- b. updating the dynamic document display pane definition to point to the changed filter, the display pane definition defining a display window;
- c. reading a display pane row for a display pane associated with the filter; and
- d. executing the filter.

28. The method of claim 23, wherein the display is updated after the step of maintaining and executing the affected sort if the revision is a sort revision.

29. The method of claim 23 wherein the step of updating the management record instances if the revision is a data revision, comprises the steps of:

- a. determining whether a record has been changed;
- b. updating the management record instances for a changed primary record instance if a record has been changed;
- c. determining whether an record has been added;
- d. updating the management record instances for a new primary record instance if a record has been added;
- e. executing the management record filters;
- f. executing the management record functions;
- g. updating the dynamic documents; and
- h. re-displaying the dynamic documents to show the data revision.

30. The method of claim 29, wherein the substep of updating the management record pointer instances for a changed primary record instance comprises the steps of:

- a. determining whether field values for a set of related fields are equal; and
- b. removing a pointer within the management record pointer instance.

31. The method of claim 29, wherein the substep of updating the management record pointer instances for a new primary record instance comprises the steps of:

- a. retrieving the new primary record instance;
- b. determining where the new primary record instance is used by reading the primary record type definition and the management record type definition corresponding to the primary record instance;
- c. determining whether the primary record type is a lead primary record of a management record pointer family;